

Special Issue

Molecular Mechanisms and Function Impact of Protein Modifications

Message from the Guest Editor

Over 650 types of protein modifications have been identified, including removal of N-terminal methionine, acetylation, methylation, phosphorylation, ubiquitination, glycosylation, lipidation, and many others. These biological events greatly expand the functional diversity of the proteome and play crucial roles in regulating cellular processes. They can alter protein conformation, localization, activity, stability, and interactions with other biomolecules. Most of these modifications are reversible and dynamically regulated by enzymes that add or remove the modifications. Dysregulation of these modifications can lead to various diseases. This Special Issue will include research on the molecular mechanisms underlying the biological activities of the enzymes involved in protein modifications, the crosstalk between these modification processes, new approaches for identifying and quantifying modifications, the links between modification processes and human disease outcomes, and innovative strategies for selectively interfering with these processes. We welcome the submission of original research and review manuscripts.

Guest Editor

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Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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